

PERMIT TO OPERATE
Number 01395

Valid July 1, 2000 to June 30, 2001

This Permit Has Been Issued To The Following:

Company Name / Address:	Facility Name / Address:
Waste Management of California 2801 Madera Road Simi Valley, CA 93065	Simi Valley Landfill 2801 Madera Road Simi Valley, CA 93065

Permission Is Hereby Granted To Operate The Following:

Landfill Gas Collection and Flare System, including gas wells and piping

- 1 - 1000 Gallon Three Phase Separator Tank, with vent line connected to the Landfill Gas Collection System
- 1 - 1500 Gallon Hydrocarbon Condensate Storage Tank, with vent line connected to the Landfill Gas Collection System
- 1 - 10000 Gallon Waste Water Storage Tank, with vent line connected to the Landfill Gas Collection System
- 1 - Packaged Condensate Clean-Up Skid with all gaseous emissions directed to the Landfill Gas Collection System
- 1 - Electric Powered Gas Blower
- 1 - 44 MMBTU/hr McGill Environ. System Landfill Gas Flare, with multi-jet burner, propane gas pilot, electric ignitor, UV flame scanner, flame arrester, thermocouple with temp. indicator and recorder, automatic shutdown and restart, automatic combustion air regulating system and temp. controller.

This Permit Has Been Issued Subject To The Following Conditions:

1. Permitted Emissions	Tons/Year	Pounds/Hour
Reactive Organics	4.88	1.10
Nitrogen Oxides	11.57	2.64
Particulate Matter	7.30	1.67
Sulfur Oxides	2.06	0.47
Carbon Monoxide	38.56	8.80

2. Landfill Gas Flare Emission Limits:

- a) The landfill gas flare shall be maintained at a minimum temperature of 1600 degrees Fahrenheit as indicated by the flare temperature recorder. This requirement shall not apply during the first fifteen (15) minutes of flare startup. This condition is applied as Best Available Control Technology (BACT) for reactive organic compounds (ROC).
- b) The landfill gas flare shall be maintained and operated with a non-methane organic compound (NMOC) destruction efficiency of at

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least 98 percent by weight, or greater. This condition is applied in order to comply with APCD Rule 74.17, Solid Waste Disposal Sites.

- c) Emissions of reactive organic compounds (ROC) from the landfill gas flare shall not exceed 1.09 pounds per hour. This condition is applied as Best Available Control Technology (BACT) for reactive organic compounds (ROC). For compliance with this condition, ROC can be assumed to be equal to NMOC.
- d) Emissions of oxides of nitrogen (NO_x measured as NO₂) from the landfill gas flare shall not exceed 0.06 pounds per million BTUs of heat input. This condition is applied as Best Available Control Technology (BACT) for oxides of nitrogen (NO_x) and for Rule 74.17.C.3.b compliance.
- e) Emissions of oxides of nitrogen (NO_x measured as NO₂) from the landfill gas flare shall not exceed 2.64 pounds per hour. This condition is applied as Best Available Control Technology (BACT) for oxides of nitrogen (NO_x).
- f) Emissions of carbon monoxide (CO) from the landfill gas flare shall not exceed 0.20 pounds per million BTUs of heat input. This condition is applied for Rule 74.17.C.3.c compliance.

In order to comply with this condition, Simi Valley Landfill shall maintain the flare temperature indicator and recorder as required by this permit and shall perform source testing as required by this permit. Failure to meet the above limits as indicated by the flare temperature recorder or source testing shall be considered to be a violation of this condition.

- 3. The piping system connecting the vent lines from the 1,000 gallon Three Phase Separator Tank, the 1,500 gallon Hydrocarbon Condensate Tank, the 10,000 gallon Waste Water Storage Tank, the Condensate Clean-up Skid, and the Packaged Centrifuge Particulate Removal Skid shall be connected to the Landfill Gas Collection System. The piping system shall contain no venting devices except for emergency relief devices. All of the collected gas from these systems shall be commingled with the landfill gas prior to being metered and incinerated.
- 4. Hourly and annual fuel consumption rates and process rates shall not exceed the following limits:

Landfill Gas Extraction and Flare System:

Gas Collection and Flaring Rate: 83.3 MSCF/hr and 730 MMSCF/yr

Hydrocarbon Condensate Storage Tank:

Hydrocarbon Condensate Throughput: 21,000 gallons/yr

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In order to comply with this condition, Simi Valley Landfill shall maintain daily records and/or monthly reports of fuel consumption and process rates as required by this permit. The monthly records shall be summed for the previous 12 months. Fuel consumption totals and process rate totals for the previous 12 months in excess of the above limits shall be considered to be a violation of this condition.

5. Permittee shall comply with Rule 74.17, "Solid Waste Disposal Sites", and Rule 74.17.1, "Municipal Solid Waste Landfills". As detailed in Rule 74.17.F.3, Rule 74.17 shall no longer apply to any solid waste disposal site that has satisfied the requirements of Rule 74.17.1.H and demonstrated compliance with the requirements of Rule 74.17.1.B.
6. Simi Valley Landfill shall properly maintain and operate a landfill gas flare temperature controller that includes a thermocouple temperature indicator and a continuous temperature recorder.
7. When it is necessary to shut down the flare for regularly scheduled maintenance, the non-operating time shall not exceed 8 consecutive hours without prior written notification of such maintenance activities to the VCAPCD Enforcement Section at least 24 hours in advance. If the shutdown exceeds 8 hours in length, a written report shall follow within 5 working days describing the reason and the duration of maintenance.

The landfill gas collection system shall be isolated by the use of valves and/or blind flanges, during the maintenance shutdown, to eliminate the emission of raw landfill gas to the atmosphere. The gas collection system shall remain isolated during maintenance activities unless the collected gas is burned in an alternate fuel burning device permitted by the VCAPCD.

8. Specific instrumentation used for the control and recording of gas flow, and the exhaust temperature of the flare system shall be calibrated annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications. Safety equipment that protects the landfill gas collection system, condensate system, and flare including the flame detector, high temperature shutdown, landfill gas blower control, and air damper shall be calibrated or function-checked annually to demonstrate that the individual devices continue to meet the manufacturer's accuracy specifications or continue to operate as required. These checks shall be performed in accordance with manufacturer's specifications or, if non-specified, in accordance with acceptable industrial practices. All records of third party calibrations of the gas flow and stack temperature recording devices shall be kept in three-ring binders identifying the contracting company, technician's name and title, date of calibration and a list of calibration techniques. Comments such as, "acceptable as tested", "adjusted", "repaired", or "replaced", shall be so noted on the calibration report. All automatic shutdown and safety equipment

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for the landfill gas collection system, condensate system, and flare may be function-tested by the operator or their representatives as long as the employee's name, date of test, and comments are recorded in the landfill gas flare operations log book. All other associated gauges, thermometers, and meters not required to ensure operational compliance with this Permit to Operate or VCAPCD Rules and Regulations need not be annually inspected or calibrated.

9. The flare shall be equipped with a controller that monitors for flame failure. This failure shall initiate isolation of the flare from the landfill gas supply line by closing the isolation valve. Upon closing of the isolation valve, an alarm shall be activated to notify the operator of a system malfunction. If such failure occurs, the system shall automatically attempt to relight the flare. If the automatic relighting occurs, the isolation valve shall reopen to continue destruction of the landfill gas.
10. Filter cleaning or replacement on the Packaged Condensate Clean-up Skid and cleaning of the automatic centrifuge and sludge storage on the Packaged Centrifuge Particulate Removal Skid shall be performed so that emissions to the atmosphere are minimized. Prior to performing these activities, the operator shall assure that all the necessary equipment, parts, supplies, and personnel are immediately available. The system shall not be left unattended during these activities.
11. Spent filters and debris removed from the centrifuge shall be properly packaged and disposed of in accordance with Federal, State, and local regulations.
12. The collected condensate from the Packaged Condensate Clean-up Skid shall not be sprayed, mixed, or evaporated in any gas stream directed to the landfill flare.
13. No gas wells shall be installed into the former Class I Area of the landfill, except for three wells (25, 26, 27) installed into the areas of Class I refuse located within 150 feet East, 100 feet South, and 200 feet North of Gas Probe No. 4 (designated GP-4), and three wells (28, 29, 30) installed into the areas of Class I refuse located within 400 feet North and 400 feet West of Gas Probe No. 5 (designated GP-5).
14. The vacuum gauges located on the tanks or associated piping of the 1,000 gallon Three Phase Separator Tank, the 1,500 gallon Hydrocarbon Condensate Tank, the 10,000 gallon Waste Water Storage Tank, the Packaged Condensate Clean-up Skid, and the Packaged Condensate Centrifuge Particulate Removal Skid shall indicate a vacuum at all times the Landfill Gas Collection System gas blower is operating. These gauges shall be maintained in accordance with manufacturers recommendations.
15. Once every two years, prior to April 1st, an emissions source test

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shall be performed on the landfill gas flare inlet and landfill gas flare exhaust in accordance with District Rule 74.17. This test shall measure and record the emissions levels and concentrations of oxides of nitrogen (NOx), reactive organic compounds (ROC), carbon monoxide (CO), and excess oxygen (O2) from the flare; shall determine the non-methane organic compound (NMOC) destruction efficiency of the flare; and shall determine the gross heating value of the landfill gas. The APCD shall be given the opportunity, with sufficient notice of a minimum of 5 working days, to observe the emissions testing.

A source test plan for complying with the above outlined testing shall be submitted 30 days prior to the test for APCD approval. The test plan shall include, but not be limited to, a discussion of sampling methods, test date, analytical methods, test equipment inventory, and calibration procedures. NOx shall be determined using EPA Method 7E; CO shall be determined using EPA Method 10; and O2 shall be determined using EPA Method 3A. ROC, NMOC, and NMOC destruction efficiency shall be determined using EPA Method 18, EPA Method 25, or EPA Method 25 - Modified as detailed in Rule 74.17.H.4 and 74.17.H.5. The gross (higher) heating value of the landfill gas shall be determined using ASTM D1826-77.

Within 45 days after completion of an emissions test, a test report shall be submitted to the APCD detailing the test procedures, quality assurance procedures, and the results of the tests for NOx, ROC, and CO in pounds per hour and parts per million by volume, corrected to 3% oxygen (O2), the landfill gas flow rate, the flare NMOC destruction efficiency, and the landfill gas higher heating value in BTUs per cubic foot.

16. Once every four years, prior to April 1, the landfill gas and landfill gas flare exhaust shall be tested to determine the actual concentrations, by weight, of the toxic/hazardous substances for which carcinogenic unit risk factors have been developed by the Cal EPA Office of Environmental Health Hazard Assessment or the Environmental Protection Agency and substances listed by the California Air Resources Board pursuant to Section 44321 of the California Health and Safety Code (AB 2588 List of Substances). In addition, the analysis will determine the reactive organic compound (as defined in APCD Rule 2) content in percent by weight in the landfill gas and flare exhaust; and the total reduced sulfur compounds calculated as sulfur dioxide in parts per million by volume, sulfur compounds in grains per 100 cubic feet, and the higher heating value of the landfill gas in BTUs per cubic foot and BTUs per pound. Analysis for any compound listed or referenced above which can be demonstrated as not being contained in the landfill gas and/or flare exhaust gas may be requested for removal from the required list, subject to APCD approval. The APCD shall be given the opportunity, with sufficient notice, to observe the emissions testing.

A source test plan for complying with the above outlined testing

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shall be submitted 30 days prior to the test for APCD approval. The test plan shall include, but not be limited to, a discussion of sampling methods, test date, analytical methods, test equipment inventory, and calibration procedures.

Within 45 days after completion of an emissions test, a test report shall be submitted to the APCD detailing the test procedures, quality assurance procedures, and the results of the tests as described above.

17. If an analysis of a source test indicates that the concentrations of the toxic contaminants are significantly higher than those toxic contaminants considered in the risk assessment prior to the installation of the gas collection and flare system, then a new screening health risk assessment shall be prepared and submitted within 60 days of the date the test results are available. If this second health risk assessment shows excess cancer risks greater than one in a million to the maximum exposed individual, then a more detailed risk analysis that shows acceptable risk levels based on new data will be prepared and submitted within 90 days of the date the test results are available.

If appropriate, an alternate mitigation measure may be to apply for an Authority to Construct, within 120 days of the date that the results of the second health risk analysis are available, for modifications to the system that adequately reduce the emission impact to acceptable levels. A new health risk assessment which demonstrates the acceptable risk levels shall accompany the Authority to Construct application.

18. Simi Valley Landfill shall record and maintain the following information. This data shall be maintained for the previous two years and be available to the APCD on request:
 - a) Records of the amount of landfill gas burned in the landfill gas flare on a daily basis in units of standard cubic feet per day. At the end of each month, the daily records shall be compiled into a monthly report.
 - b) Records of the amount of hydrocarbon condensate processed in the 1,500 gallon Hydrocarbon Condensate Storage Tank in units of gallons per month.
 - c) The flare temperature records as required by this permit.
 - d) Records of the flare system's testing and calibration activities as required by this permit.
 - e) Copies of the source tests as required by this permit.

Within 10 days after receipt of this permit, the permittee may petition the Hearing Board to review any new or modified condition (Rule 22).

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This permit, or a copy, shall be posted reasonably close to the subject equipment and shall be accessible to inspection personnel (Rule 19). This permit is not transferable from one location to another unless the equipment is specifically listed as being portable (Rule 20).

This Permit to Operate shall not be construed to allow any emission unit to operate in violation of any state or federal emission standard or any rule of the District.



Karl E. Krause, Manager
Engineering Section

For:

Richard H. Baldwin
Air Pollution Control Officer